

Amendments to the Abstract:

SYSTEM FOR MOUNTING A TOOL BIT IN A TOOL HOLDER

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ABSTRACT OF THE INVENTION

10 A system for mounting a tool in a tool holder ~~combining a~~
~~means~~ for high-precision centering of the tool and ~~a means for~~
positive restraint of the tool from rotation within the ~~tool~~
holder. The tool holder includes a cylindrical aperture having a
diameter slightly less than the diameter of the shank of a
cylindrical tool. The tool is installed into the tool holder by
15 heating the tool holder to a temperature sufficient to increase
the ~~pocket aperture~~ diameter sufficiently to accept the tool
shank. ~~In a first shrink-fit embodiment, the~~ The tool shank is
further provided with an angular flat for engagement with a set
screw to prevent the tool from being turned in the holder in use.
20 ~~In a second shrink-fit embodiment, a groove extending partially~~
~~around the tool receives a tangential pin through a passage in~~
~~the tool holder. The tool is rotated in the holder until the pin~~
~~binds in the groove, thus preventing any further rotation of the~~
~~tool in the holder during use. Preferably, a second tool flat is~~
25 provided opposite the first flat and extending to the end of the
tool shank for orientation of the tool by a second set screw
during insertion of the tool into the tool holder.